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### NOTICE OF ALLOWANCE AND FEE(S) DUE

53067

7590

12/17/2008

STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVE., NW WASHINGTON, DC 20036 EXAMINER

BEDTELYON, JOHN M

ART UNIT PAPER NUMBER

2874

DATE MAILED: 12/17/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,341	06/09/2006	Tomoya Sugita	28951.1176	4982

TITLE OF INVENTION: OPTICAL ELEMENT, LASER LIGHT SOURCE, AND TWO-DIMENSIONAL IMAGE FORMING APPARATUS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/17/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correcte maintenance fee notificat	correspondence including below or directed oth tions.	g the Patent, advance of erwise in Block 1, by (a	rders and notification of n a) specifying a new corres	naintenance fees will pondence address; a	ll be mai and/or (b	iled to the current of indicating a separ	correspondence address as ate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				s) Transmittal, This	certificat paper, su	te cannot be used fo ich as an assignmen	domestic mailings of the or any other accompanying tt or formal drawing, must
	7590 12/17/ OHNSON LLP FICUT AVE., NW I, DC 20036	/2008		Corti	ficate of	Mailing or Transn	nission deposited with the United c class mail in an envelope above, or being facsimile te indicated below.
							(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNI	EY DOCKET NO.	CONFIRMATION NO.
10/582,341 FITLE OF INVENTION	06/09/2006 : OPTICAL ELEMENT,	LASER LIGHT SOURC	Tomoya Sugita CE, AND TWO-DIMENSIO	ONAL IMAGE FOI		8951.1176 APPARATUS	4982
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nonprovisional	NO	\$1510	\$300	\$0		\$1810	03/17/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
BEDTELYO	N, JOHN M	2874	385-050000				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Unl recordation as set fort!  (A) NAME OF ASSIG	ND RESIDENCE DATA less an assignee is identi h in 37 CFR 3.11. Comp GNEE	Indication form ed. Use of a Customer  A TO BE PRINTED ON The service of the serv	(1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attor listed, no name will be THE PATENT (print or typ data will appear on the patent attor of the patent of	rely, e firm (having as a regent) and the names reeys or agents. If no printed.  e) atent. If an assigned assignment. and STATE OR CO	member as of up to o name is	tified below, the do	
Please check the appropriate.  The following fee(s) are suggested.  Issue Fee			o. Payment of Fee(s): (Plea A check is enclosed.		<u> </u>	1 0	
☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
a. Applicant claims	<b>tus</b> (from status indicatec s SMALL ENTITY statu	s. See 37 CFR 1.27.	☐ b. Applicant is no long				
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeecords of the United Sta	nired) will not be accepted tes Patent and Trademark	d from anyone other than the Office.	ne applicant; a regist	ered atto	rney or agent; or the	e assignee or other party in
Authorized Signature				Date			
Typed or printed name							
This collection of inform an application. Confident submitting the completed this form and/or suggesti	ation is required by 37 C tiality is governed by 35 d application form to the tons for reducing this bur	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to the NOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 m idual case. Any con r, U.S. Patent and T D THIS ADDRESS	e public vinutes to nments or rademark SEND T	which is to file (and complete, including n the amount of tim k Office, U.S. Depa O: Commissioner for	by the USPTO to process) g gathering, preparing, and the you require to complete returnent of Commerce, P.O. Patents, P.O. Box 1450.

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10/582,341	06/09/2006	Tomoya Sugita	28951.1176	4982	
53067 7:	590 12/17/2008		EXAMINER		
STEPTOE & JOHNSON LLP			BEDTELYC	N, JOHN M	
1330 CONNECTICUT AVE., NW			ART UNIT PAPER NUMBER		
WASHINGTON,	DC 20036		2874		
			DATE MAILED: 12/17/2008		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
Notice of Allowability	10/582,341 <b>Examiner</b>	SUGITA ET AL.  Art Unit	
•			
	JOHN M. BEDTELYON	2874	
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in th or other appropriate communic IGHTS. This application is subj	is application. If not included ation will be mailed in due course. <b>Th</b>	
1. X This communication is responsive to the amendment and	remarks submitted 10/20/2008.		
2. ☑ The allowed claim(s) is/are <u>8-19</u> .			
3. ☑ Acknowledgment is made of a claim for foreign priority under a) ☑ All b) ☐ Some* c) ☐ None of the:  1. ☑ Certified copies of the priority documents have		f).	
2. Certified copies of the priority documents have	e been received in Application N	lo	
3.   Copies of the certified copies of the priority do	cuments have been received in	this national stage application from t	he
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		eply complying with the requirements	5
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			=
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.		
(a) I including changes required by the Notice of Draftspers	son's Patent Drawing Review (	PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	·		
<ul><li>(b) ☐ including changes required by the attached Examiner'</li><li>Paper No./Mail Date</li></ul>	s Amendment / Comment or in	the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT</li> </ol>			
Attachment(s)	E	nal Datant Application	
<ol> <li>Notice of References Cited (PTO-892)</li> <li>D Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>		nal Patent Application	
<ol> <li>Information Disclosure Statements (PTO/SB/08),</li> </ol>		il Date	
Paper No./Mail Date			
<ol> <li>Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol>	8. ⊠ Examiner's Sta	tement of Reasons for Allowance	
/Kevin S Wood/			
Primary Examiner, Art Unit 2874			

Application/Control Number: 10/582,341 Page 2

Art Unit: 2874

#### **DETAILED ACTION**

# Response to Amendment

1. This action is responsive to the amendment and remarks submitted 10/20/2008. Claims 8 and 13 are amended. No claims are added or canceled. Claims 8-19 are currently pending in the Application.

# Response to Arguments

2. Applicant's arguments, see page 6, filed 10/20/2008, with respect to the objections and rejections of claims 8-19 have been fully considered and are persuasive. The rejections and objections of claims 8-19 have been withdrawn.

### Allowable Subject Matter

- 3. Claims 8-19 are allowed.
- 4. The following is an examiner's statement of reasons for allowance: the prior art of record does not appear to anticipate or render obvious, in combination with the other claim limitations, wherein an optical path length L from a light input surface of the waveguides to a light output surface of the waveguides satisfies the following equation:  $L \ge W/\tan(\sin^{-1}(\sin(\Theta/2)/n))$ , wherein W is a width of the waveguide, n is a refractive index inside the waveguide, and  $\Theta$  is a minimum beam spread angle of the semiconductor laser (see claims 8 and 13).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Art Unit: 2874

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. BEDTELYON whose telephone number is (571)270-1290. The examiner can normally be reached on Monday - Friday, 10:00am - 6:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Uyen-Chau Le can be reached on 571-272-2397. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JMB/ Examiner, Art Unit 2874

> /Kevin S Wood/ Primary Examiner, Art Unit 2874